Meeting of the Central Valley Flood Protection Board September 23, 2010

Staff Report – Encroachment Permit

Marshall Pylman Irrigation Pipe Replacement, Yolo County

<u>1.0 – ITEM</u>

Consider approval of Permit No. 18611 (Attachment B)

2.0 – APPLICANT

Marshall Pylman

3.0 - LOCATION

The project is located about one half mile north of the town of Courtland. (Sacramento River, Yolo County, see Attachment A)

4.0 - DESCRIPTION

Applicant proposes to remove an existing 12-inch-diameter irrigation pipe and replace it with a new 12-inch-diameter steel pipe up and over the right (west) bank levee (RM 35.12) of the Sacramento River.

5.0 - PROJECT ANALYSIS

The existing pipe was installed in the early 1960's and is listed as a project feature in the Operations and Maintenance Manual for the Sacramento River Flood Control Project (Unit No. 112 Levee Around Merritt Island). Due to leakage the existing pipe has caused a void in the levee crown under the north bound lane of South River Road. The new replacement pipe will be installed to current Title 23 standards.

5.1 – Hydraulic Analysis

As a project feature the replacement of the existing pipe does not require a hydraulic analysis.

5.2 – Geotechnical Analysis

Replacement of the pipe does not require a geotechnical analysis.

<u>6.0 – AGENCY COMMENTS AND ENDORSEMENTS</u>

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The U.S. Army Corps of Engineers 208.10 comment letter has not yet been received for this application. Upon receipt of a favorable letter and review by Board staff it will be incorporated into the permit as Exhibit A.
- Reclamation District No. 150 has endorsed this application without conditions.

7.0 - CEQA ANALYSIS

Board staff has prepared the following CEQA determination:

Reclamation District No. 150, as the lead agency under CEQA, approved the project on September 13, 2010 and determined that the project was categorically exempt under a Class 1 Categorical Exemption (CEQA Guidelines Section 15301) covering maintenance of an existing serviceable structure. The Board, acting as a responsible agency under CEQA, has reviewed the Reclamation District No. 150 determination and has independently determined that the project is exempt from CEQA under Class 1

(CEQA Guidelines Section 15301) covering maintenance of an existing serviceable structure.

8.0 - SECTION 8610.5 CONSIDERATIONS

 Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

The proposed new pipe will be replaced in the same location as the existing pipe which is a project feature so there will be no impacts to the State Plan of Flood Control.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

Larger flows in the Sacramento River due to global warming or an increased level of protection may require the irrigation pipe to be raised.

9.0 – STAFF RECOMMENDATION

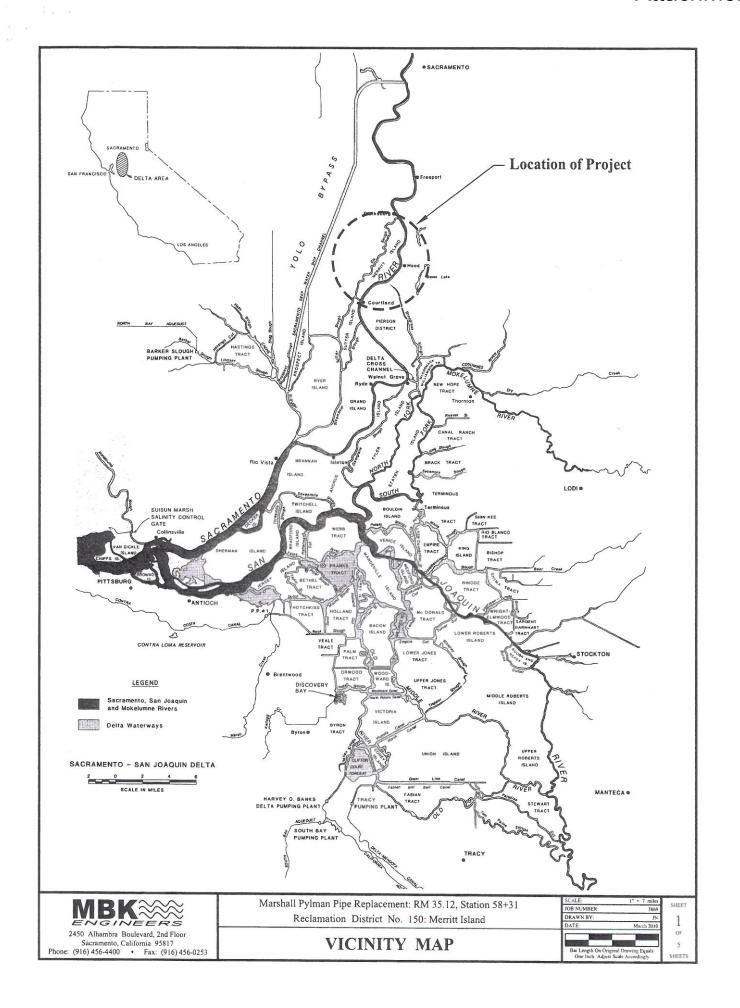
Staff recommends that the Board determine the project to be exempt from CEQA and approve the permit conditioned upon receipt of a favorable U.S. Army Corps of Engineers comment letter.

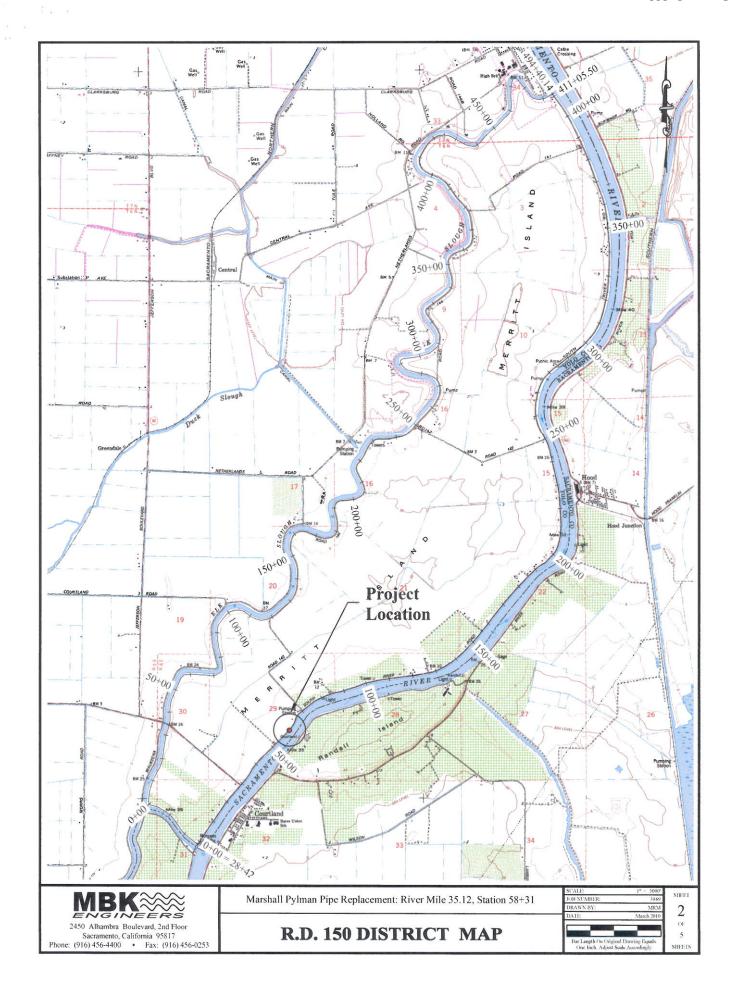
10.0 - LIST OF ATTACHMENTS

A. Location Maps and Photos

B. Draft Permit No. 18611

Design Review: Gary W. Lemon P.E.
Environmental Review: James Herota
Document Review: Len Marino P.E.







Facing west, view of landside slope and standpipe at toe of levee from landside hinge.



Facing east, view of waterside slope and pump/pipe from the waterside crown hinge.

RD 150 Emergency Pipe Replacement -March 25, 2010

Photographer - Michael Moncrief



Attachment A



Facing west, view of landside vegetation from waterside crown hinge.

RD 150 Emergency Pipe Replacement –March 25, 2010

Photographer - Michael Moncrief



DRAFT

STATE OF CALIFORNIA THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18611 BD

This Permit is issued to:

Marshall Pylman 38368 South River Road Clarksburg, California 95612

To remove existing 12-inch-diameter irrigation pipe and replace with a new 12-inch-diameter steel pipe up and over the right (west) bank levee (RM 35.12) of the Sacramento River. The project is located north of Courtland (Section 29, T6N, R4E, MDB&M, Reclamation District 150, Sacramento River, Yolo County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project

as described above.

(SEAL)	
Dated:	
	Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15

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days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18611 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion

FIFTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SIXTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and Reclamation District No. 150 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

SEVENTEEN: No construction work of any kind shall be done during the flood season from November 1st to April 15th without prior approval of the Central Valley Flood Protection Board.

EIGHTEEN: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

NINETEEN: A temporary bench mark, set to a known datum, shall be placed at the project site during construction.

TWENTY: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to April 15th.

TWENTY-ONE: No excavation shall be made or remain in the levee section during the flood season from November 1st to April 15th.

TWENTY-TWO: The pipe shall be installed through the levee section at a right angle to the centerline of the levee.

TWENTY-THREE: The pipe shall be placed in an open cut with side slopes of 1 horizontal to 1 vertical or flatter.

TWENTY-FOUR: The pipe shall be placed in the center of an open trench 2 feet wider than the diameter of the pipe or 2 times the diameter, whichever is greater.

TWENTY-FIVE: Pipe installed in the levee section and within 10 feet of the levee toes shall be new steel and at least ten (10)-gauge. Steel pipe shall be corrosion-proofed externally with a coating of coal-tar enamel; asphalt-saturated felt wrap; cement mortar; or PVC or polyethylene tape wrapped to a thickness of 30 mils. Steel pipe shall be corrosion-proofed internally with a continuous lining of cement mortar or asphalt.

TWENTY-SIX: A positive-closure device that is readily accessible during periods of high water shall be installed on the waterward side of the levee.

TWENTY-SEVEN: A suitable siphon breaker and protective housing shall be installed on the apex of the pipe and shall be located off the levee patrol road.

TWENTY-EIGHT: The invert of the pipe through the levee section shall be above the design flood plane elevation of 18.5-feet, NGV Datum.

TWENTY-NINE: All pipe joints within the levee section shall be butt welded.

THIRTY: The pipe shall be buried at least 24 inches below the levee crown.

THIRTY-ONE: The pipe shall be buried at least 12 inches below the landward levee slope.

THIRTY-TWO: Only impervious material shall be used for bedding or backfill within the levee section.

THIRTY-THREE: Backfill material for excavations within the levee section shall be free of stones or lumps that exceed 3 inches in greatest dimension, organic matter, or other unsatisfactory material

and shall be compacted to at least 90 percent relative compaction as measured by ASTM Method D1557-91.

THIRTY-FOUR: The project site shall be restored to at least the condition that existed prior to commencement of work.

THIRTY-FIVE: The pipe shall be tested and confirmed free of leaks by X-ray, pressure tests, or other approved methods during construction or anytime after construction upon request by the Central Valley Flood Protection Board.

THIRTY-SIX: The permittee is responsible for repairing any damage to the levees caused by the installation or operation of the pipe.

THIRTY-SEVEN: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

THIRTY-EIGHT: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

THIRTY-NINE: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

FORTY: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated September XX, 2010, which is attached to this permit as Exhibit A and is incorporated by reference.